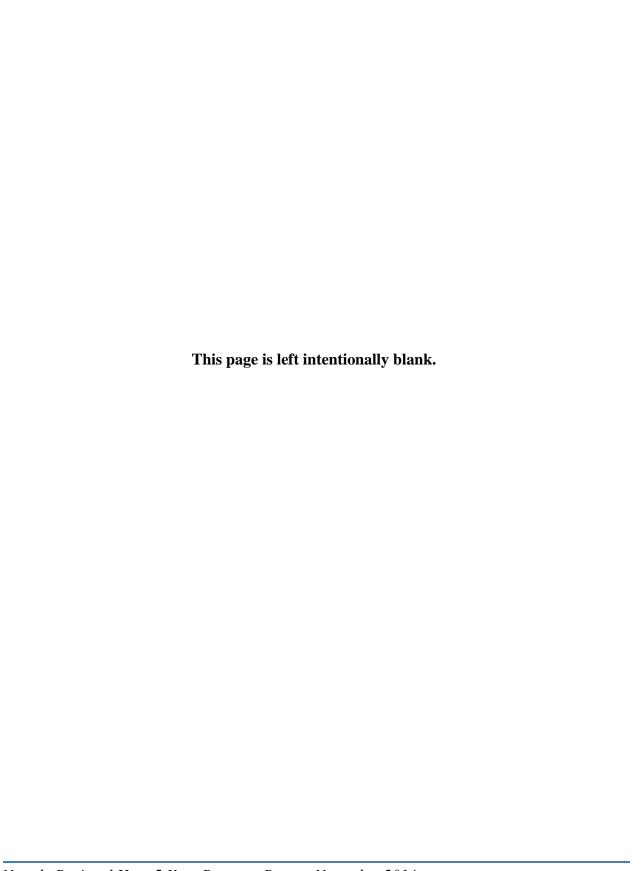
# APPENDIX C

Federal Land Management Agency Comments and Nevada's Responses



## **Appendix C**

## Federal Land Management Agency Comments and Nevada's Responses September 15, 2014

On June 16, 2014, pursuant to 40 C.F.R. 51.308(i)(2), the Nevada Division of Environmental Protection (NDEP) provided the Federal Land Managers with a draft Regional Haze 5-Year Progress Report (Report) for a 60-day review. The NDEP received comment letters from:

- > The United States Department of the Interior National Parks Service (NPS) on August 15, 2014
- ➤ The United States Department of Agriculture Forest Service (USFS) on August 29, 2014

Nevada replied to the NPS on September 12, 2014 with the responses presented below. The responses are organized by Report chapter; if a chapter is not listed below, there were no comments. The USFS letter had no comments that required a response. Copies of the NPS and USFS comment letters follow the set of comments and responses below.

### **NPS Comments**

#### **CHAPTER FOUR**

COMMENT 1: Table 4-2 and 4-3 do not show the same deciview values for 2007-2011 and 2008-2012. Please check.

RESPONSE: The value for the 2008-2012 worst days has been corrected from the 2012 annual average to the 2008-2012 5-year average in Table 4-3. The 2007-2011 values are correct in Table 4-3. The values in Table 4-2 were confirmed as correct.

#### **CHAPTER FIVE**

COMMENT 2: Section 5.4, p. 5-8. Please add in the introductory section that the tables compare fire inventories for one year, 2008, to the five-year average for 2000-2004. This point is made on p. 5-16 under discussion of volatile organic carbon, but it is relevant to every pollutant and every inventory sector.

RESPONSE: Text was added to Section 5.4, p 5-8, noting that fire emissions from only a single year (2008) were used for the 2008 DEASCO<sub>3</sub> study, which was used as the data source for fire emissions in developing the WestJump2008 inventory. It is noted that this results in a somewhat misleading comparison with the baseline period, which used a 5-year average from 2000-2004.

COMMENT 3: Section 5.5.8 Coarse Mass. Please make the connection that coarse mass has the second greatest contribution to visibility impairment on the 20% worst visibility days at Jarbidge WA. Anthropogenic coarse mass is projected to increase in the 2008 inventory; possibly due to increased activity and/or changes in inventory methods. These data together suggest that NDEP should consider control options for anthropogenic sources of coarse mass the 2018 revisions to Nevada's regional haze plan.

RESPONSE: The point that coarse mass is the second greatest contributor to visibility impairment on the 20% worst visibility days at Jarbidge WA is made in Chapter Four, Assessment of Visibility Conditions, Sections 4.1 and 4.4, as well as Section 1.3 of the introductory chapter. Chapter Five is rather a straightforward analysis tracking the changes in emissions of visibility impairing pollutants over the last five years and does not discuss the relative impacts of the pollutants at Jarbidge. While it is true that anthropogenic coarse mass emissions are projected to increase in the 2008 inventory, these increases may in large part be due to changes in inventory development methodologies rather than actual increases, as noted in Chapter Five. Interestingly, examination of county level data in the WestJump2008 inventory for coarse mass indicates that over 60 % of these emissions are in Clark County.

In the 2018 SIP revision, the NDEP will consider all appropriate control scenarios for anthropogenic sources of coarse mass emissions. A sentence has been added to the Executive Summary indicating that the NDEP will re-evaluate sources of visibility impairment in the 2018 SIP revision and revise its strategy, as appropriate.

### **CHAPTER SIX**

COMMENT 4: Chapter 6: The WRAP 2002 and 2018 modeling included particulate source apportionment analyses that demonstrated Nevada's contribution to visibility impairment at Class I areas in neighboring states and other states' contributions at Jarbidge WA. Summarizing these data would assist in demonstrating that Nevada is reducing its contribution to neighboring states and would provide context for the discussions of controls in Idaho and Oregon.

RESPONSE: The NDEP added a new summary of other states' contributions to visibility impairment measured at JARB1 in Section 6.3 to provide additional context for the discussion of BART implementation in Idaho and Oregon. The text describes the sulfate and nitrate contributions to visibility impairment at JARB1 based on the particulate source apportionment modeling conducted by the WRAP for the original RH SIPs. The NDEP also added a new section to Chapter 6 providing a discussion of Nevada's contributions to other Class I areas based on the source apportionment modeling results to assist with the demonstration that Nevada is reducing its contributions to neighboring states, including a summary of emissions reductions from Nevada sources between 2002 and 2008.

### **National Park Service Comment Letter**



## United States Department of the Interior

NATIONAL PARK SERVICE Air Resources Division P.O. Box 25287 Denver, CO 80225-0287

#### TRANSMITTED VIA ELECTRONIC MAIL - NO HARDCOPY TO FOLLOW

N3615 (2350)

August 15, 2014

Adele K. Malone Bureau of Air Quality Planning Division of Environmental Protection 901 S. Steward Street, Suite 4001 Carson City, NV 89701 Dear Ms Malone: Adele

Thank you for the opportunity to review and comment on Nevada's draft Regional Haze 5-Year Progress Report. We believe that Nevada Division of Environmental Protection (NDEP) has met the requirements for the periodic progress report as outlined in 40 CFR 41.508 (g) and (h). NDEP has demonstrated significant reductions of anthropogenic emissions, primarily through retirements or controls of electric generating units (EGU) and implementation of federal air regulations. Anthropogenic emissions are already below the 2018 emissions projections that were used by the Western Regional Air Partnership in the 2018 regional air quality modeling. Additional retirements of coal fired power plants, installation of BART controls, and Nevada state laws will further reduce Nevada anthropogenic emissions by 2018. Because Nevada and the western states used the 2018 WRAP model results to set 2018 visibility reasonable progress goals, we agree that Nevada is not interfering with the ability of its neighboring states to meet their 2018 goals.

NDEP has demonstrated that particulate organic carbon, coarse mass, and sulfate are the most important pollutants contributing to impairment on the 20% worst visibility days at Jarbidge Wilderness Area (WA). Despite anthropogenic emission reductions to date, visibility on the 20% worst days in the 2008-2012 period has shown little improvement compared to the 2000-2004 base period. Due to the contributions of uncontrollable emissions, it is not clear that the 2018 visibility goals for Jarbidge will be met. Visibility on the 20% best days has improved and is close to natural conditions. Given the additional anthropogenic emissions reductions required by 2018, we agree that no additional control measures are needed at this time.

Below are suggestions to improve NDEP's demonstration.

- 1) Table 4-2 and 4-3 do not show the same deciview values for 2007-2011 and 2008-2012. Please check.
- 2) Section 5.4, p. 5-8. Please add in the introductory section that the tables compare fire inventories for one year, 2008, to the five-year average for 2000-2004. This point is made on p. 5-16 under discussion of volatile organic carbon, but it is relevant to every pollutant and every inventory sector.
- 3) Section 5.5.8 Coarse Mass. Please make the connection that coarse mass has the second greatest contribution to visibility impairment on the 20% worst visibility days at Jarbidge WA. Anthropogenic coarse mass is projected to increase in the 2008 inventory; possibly due to increased activity and/or changes in inventory methods. These data together suggest that NDEP should consider control options for anthropogenic sources of coarse mass the 2018 revisions to Nevada's regional haze plan.
- 4) Chapter 6: The WRAP 2002 and 2018 modeling included particulate source apportionment analyses that demonstrated Nevada's contribution to visibility impairment at Class I areas in neighboring states and other states' contributions at Jarbidge WA. Summarizing these data would assist in demonstrating that Nevada is reducing its contribution to neighboring states and would provide context for the discussions of controls in Idaho and Oregon.

We appreciate the opportunity to work closely with NDEP to improve visibility in our Class I national park and wilderness areas. If you have questions, please contact me at patricia\_f\_brewer@nps.gov or 303-969-2153.

Sincerely,

Pat Brewer

cc:

Tom Webb, EPA Region 9

at Brewer

### **U.S. Forest Service Comment Letter**



Forest Service Intermountain Region

324 25th Street Ogden, UT 84401 801-625-5605

Adele K. Malone Supervisor Bureau of Air Quality Planning 901 S. Stewart Street **Suite 4001** Carson City, NV 89701

File Code: 2580 Date: AUG 2 8 2014

Nevada RECEIVED
Environmental Protection

Environmental Protection

AUG 29 2014

RECEIVED

BAPC/BAQP

Dear Ms. Malone:

On June 16, 2014, The State of Nevada submitted a draft regional haze 5-year progress report. The report demonstrated the progress made toward achieving visibility improvement goals for mandatory Class I areas, including the Jarbidge Wilderness, as outlined in the Nevada regional haze implementation plan. This letter acknowledges that the U.S. Department of Agriculture, Forest Service, has received and conducted a review of this 5-year Progress Report. We have no additional comments at this time. We look forward to reviewing future updates and reports.

We appreciate the opportunity to continue working closely with the state on achieving the Clean Air Act's goal of natural visibility conditions in mandatory Class I wilderness areas and parks. For further information or if you have any questions, please contact Intermountain Region Air Resource Program Manager, Jeff Sorkin at (303) 275-5759.

Sincerely,

Hat Christanson √NORA B. RASURE Regional Forester



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